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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,648	11/04/2003	Naoya Ishikawa	953.1012	5367
21171	7590	02/18/2005	EXAMINER	
STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			TRIEU, THAI BA	
			ART UNIT	PAPER NUMBER
			3748	

DATE MAILED: 02/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/699,648	ISHIKAWA, NAOYA	
	Examiner	Art Unit	
	Thai-Ba Trieu	3748	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

This Office Action is in response to the Amendment filed on November 30, 2004.

Claims 1, 3, 5 were amended; and claims 6-8 were cancelled.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Minami (Pub. Number 2002-276405 A), in view of Tsuchiya et al. (Patent Number JP 07-259654 A).

Minami discloses an EGR system for an internal combustion engine (2) with a turbocharger (8), comprising a first EGR passage (Not Numbered, Read as a passage including valve 21) for recirculating a part of the exhaust gas from the upstream side of a turbine (81) of the turbocharger (8) to the downstream side of a compressor (82) of the turbocharger, wherein a second EGR passage (24) for recirculating a part of the exhaust gas from the downstream side of said turbine (81) to the upstream side of said

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compressor (82), a diesel particulate filter (13), a flow control means (21) for controlling the exhaust gas in said first EGR passage (Read as a passage including valve 21) and said second EGR passage (24), an exhaust gas purifying apparatus (14), an EGR control means (25) for controlling the flow control means based on data detected by an exhaust gas state monitoring means are provided, and the second EGR passage being branched out on an upstream side of the exhaust gas purifying apparatus (See Figure 1, Paragraphs from [0025] to [0028]);

Wherein the flow control means being composed of the first EGR valve (21) arranged in said first EGR passage and the second EGR valve (25) arranged in said second EGR passage, and the EGR control means (10) controls the exhaust gas flow by controlling said first EGR valve (21) and said second EGR valve (25) to be open/closed said exhaust gas state monitoring means being composed of an exhaust gas temperature sensor arranged in said exhaust passage, and the EGR control means controls the exhaust gas flow by controlling said first EGR valve and said second EGR valve to be open/closed based on the exhaust gas temperature detected by the exhaust gas temperature sensor (See Figure 1, and Paragraphs [0012] and [0013]);

wherein when said exhaust gas detection temperature is not higher than the regeneration temperature of said diesel particulate filter, said first EGR valve is controlled to be open, while said second EGR valve is controlled to be closed, and when said exhaust gas detection temperature is higher than the regeneration temperature of said diesel particulate filter, said second EGR valve is controlled

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to be open (See Paragraphs [0012], [0013], [0014], [0015], [0016], and [0017]);
and

wherein said diesel particulate filter (13) is composed of a diesel particulate filter with an oxidation catalyst (12) (See Figure 1, Paragraph [0007]).

However, Minami fails to disclose the location of the diesel particulate filter being in the second EGR passage after the second EGR passage is branched out of the main exhaust gas passage.

Tsuchiya teaches that it is conventional in the turbocharged internal combustion engine art having exhaust gas recirculation system, to position the diesel particulate filter in the second EGR passage after the second EGR passage is branched out of the main exhaust gas passage (See Figures 2 and 3).

It would have been obvious to one having ordinary skill in the art at that time the invention was made, to have positioned the diesel particulate filter in the second EGR passage after the second EGR passage is branched out of the main exhaust gas passage, as taught by Tsuchiya, to prevent the compressor from being deteriorated in durability, in the Minami diesel engine.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Minami (Pub. Number 2002-276405 A), in view of Tsuchiya et al. (Patent Number JP 07-259654 A), and further in view of Yasuma et al. (Patent Number JP 05-071428 A).

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The modified Minami discloses the invention as recited above; however, fails to disclose an inlet of the second EGR passage being arranged at the upstream side of said turbine.

Yasuma teaches that it is conventional in the turbocharged internal combustion engine art, to utilize an inlet of the second EGR passage being arranged at the upstream side of said turbine (via 33, 14, 30, 29, 31, 26, 8) (See Figure 3).

It would have been obvious to one having ordinary skill in the art at that time the invention was made, to have utilized an inlet of the second EGR passage being arranged at the upstream side of said turbine, as taught by Yasuma, to improve the reduction of exhaust emissions, in the modified Minami diesel engine.

Response to Arguments

1. In the Office Summary, mailed on August 31, 2004, there was an examiner's mistake on clicking the Final-Rejection box, instead of clicking on **the Non-Final Rejection box**. **A correction copy for the Office Summary mailed on 08/31/2004 is attached hereto.**

2. Submission of certified copy of prior foreign application in accordance with the requirements of 37 USC § 1.55 has been acknowledged.

3. Applicant's arguments, see Page 4, filed November 30, 2004, with respect to the claim rejection(s) under 35 USC § 112, second paragraph have been fully considered and are persuasive. Therefore, the rejection has been withdrawn.

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4. Applicant's arguments with respect to claims 1-8 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Yanagisawa (Pub. Number JP 2002-285879 A) discloses exhaust gas recirculation device for engine with a supercharger.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai-Ba Trieu whose telephone number is (571) 272-4867. The examiner can normally be reached on Monday - Thursday (6:30-5:00).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion can be reached on (571) 272-4859. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TTB
February 15, 2005



Thai-Ba Trieu
Primary Examiner
Art Unit 3748